

CEJCHAN, ADOLF

CZECHOSLOVAKIA / General and Special Zoology. Insects P

Abs Jour: Ref Zhur-Biol., No 1, 1958, 2144

Author : Adolf Cejchan

Inst :

Title : The Orthoptera Insects of the Nakhod Rayon.

Orig Pub: Casop. Narodn. musea. Odd. prirodooved., 1956, 125,
No 2, 156-161

Abstract: List consists of 8 grasshopper species, 1 cricket
and 18 locust species, found in the Nakhod rayon of
Czechoslovakia in 1952-1955. Short ecological and
biological information about each species.

Card 1/1

CEJCHAN, A.

"A recently discovered species of the genus Poecilimon FISCH from Albania;
Orthoptera, Tettigoniidae. In German."

p.5 (Sbornik Faunistickych Praci. Acta Faunistica Entomologica, No. 2, 1957,
Praha Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No.6 June 1958.

CEJCHAN, Adolph, dr. (Hradec Kralove I, Husovo namesti 124)

A new *Glyphotmethis* (Orthoptera, Pamphagidae) from Turkey.
Cas. entom. 61 no. 3: 220-223 '64.

1. Department of Entomology, Regional Museum, Hradec, Kralove.

GEJCHAN, O.; FOVONDRA, P.

Determination of small amounts of mercury in complex nonferrous ores.
p. 153. RUDY. (Ministerstvo hutniho prumyslu a rudnych dol) Praha.
Vol. 4, no. 5, May 1956.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

CEJCHAN, O.

- Copyright: Publikum České Akademie věd, 1962.

 1. "Reorienting the Range of the Johannit Minerals in
Burrianum Čes., Otto ŠEJKA, pp. 121-125.
 2. "Remarks on the Flora of Miofauna Fauna in the Reichenmu-
dste Layer of the Norwegian-Silesian Series," René
ELIASSEN, pp. 130-131.
 3. "Mineralogy of Cadmium in a No. 3a Vein-jadeite in North-West
PROVINCIAL Mts., Tsumeb," pp. 132-135.
 4. "New Finds of Phosphate-minerals (Barite, 1600 m
the Juraendeckens near Lüdenscheid, Westphalia)," pp. 136-137.
 5. "Remarks on the Aluminous Formation of the Northern Part
of the Vltava-River Valley," Pavel KUDRINA, pp. 138-
157.
 6. "Local Spectroscopic Measurements of Mineralogical Altera-
tion URGALA and ALLOM SPANOVÁ of the Central Geological
Institute (Central Water Geology), Tsumeb," pp. 158-
164.
 7. "Remarks on the Border Between the Middle and Upper Do-
vorian in the Bohemian Massif," Rudolf BENEŠ and
Pavel JUDKOV, pp. 165-175.
 8. "Geological Cross Section Near Hirneč, Moravia," JAROSLAV
TRČEK of the Central Geological Institute, Prague,
pp. 176-180.
 9. "Geology and Stratigraphy," Konzil. ŽIVNÍČEK, pp. 181-186.
 10. "Bacteria in the Recent Sea Sediments," Daniel RUFKE,
pp. 187-192.
 11. "Adjustment of Comparative Spectra Pattern for Another
Type of Spectrometer Unit," János KALMIK of Balaton's
Atmos. for the WEG Spectroray, pp. 193-197.
 12. "Notes on the Yellow Polymictic Gneiss from Krupka in Bohem-
ia," František ČERNÝ of the Geological Institute,
Czechoslovak University of Technology, Prague, pp. 198-207.

CEJCHAN, Otto, prof.; SMRCEK, Karel, inz; SRB, Jaroslav

Changes of the mineral composition of heat-hardened magnetite
pellets. Rudy II no. 12:400-408 D'63.

1. Vyzkumny ustav, Zalezne doly a hrudkovny, Mnisek pod Brdy.

SMRCEK, Karel, inz.; KANDL, Jan, inz.; CEJCHAN, Otto, prof.

Palletizing of pyrite cinder. Hut listy 18 no. 9:611-621
S'63.

1. Vyzkumny ustav, Zelene doly a hrudkovny, Mnisek pod
Hrdy.

SMRCEK, Karel, inz.; CEJCHAN, Otto, prof.; SRB, Jaroslav

Slag and recrystallization bond of heat-hardened pellets.
Sbor Vyzk ust Mnisek 4:93-102 '64.

Changes in the mineral composition of heat-hardened pellets.
Ibid.:103-113

1. Research Institute of the Zalezorudne doly a hrudkovny
National Enterprise, Mnisek.

CEJCHAN, Otto, prof.

Remarks on the composition of Chvaletice ores. Sbor Vyzk
ust Mnisek 4:213-227 '64.

1. Research Institute of the Zalezorudne doly a hrudkovny
National Enterprise, Mnisek.

L 47520-66 E&P(t)/ETI IJP(c) JD

ACC NR: AT6035011

SOURCE CODE: HU/2504/66/054/01-/0061/0072

SMRCEK, K., CEJCHLA, O., and CHVATIK, J., of the Research Institute for
the Iron Mine and Smelting Plant [original-language version not given]
in Mnisek Pod Drdy, Czechoslovakia.

Contribution to the Problematics of Formation of the Magnetic Charac-
teristics in α -Fe₂O₃ Upon Heating to Medium Temperatures"

Budapest, Acta Technica Academiae Scientiarum Hungaricae, Vol 54, No 1-2,
8 Jun 1966, pp 61-72.

24

B41

Abstract: [German article] The possible formation of maghemite (γ -Fe₂O₃) by annealing in the 500° - 800°C temperature range was studied on samples of a specular hematite concentrate, an Indian hematite ore, and a synthetic Fe₂O₃ material. The formation of the new phase, exhibiting magnetic properties, was observed and the presence of bivalent iron was verified by analysis. It is most probable that magnetite is the sole carrier of the magnetic properties originating by the reducing action of sulfur liberated by the thermal dissociation of the sulfides present and possibly also by the action of carbon monoxide contained in the gaseous dissociation products of siderite heating. These assumptions were verified in the synthetic mixtures.

Orig. art. has: 5 figures, 2 formulas and 3 tables. DPRS: 36,867
TOPIC TAGS: iron oxide, annealing
SUB CODE: 11,13 / SUBM DATE: 01 Aug 64 / ORIG REF: 001 / OTH REF: 008

Card 1/1 vir

0921 1220

CEJCHAN, Slavomir

Effect of the use of steel supports in mines on labor productivity and cost of materials. Uhli 4 no.5:159-162
My '62.

1. Sdruzeni Ostravsko-karvinskych dolu, Ostrava.

S/081/63/000/004/040/051
B160/B186

AUTHORS: Štěpina, Václav, Veselý, Václav, Čejka, František

TITLE: Method of producing engine oils for two-stroke gasoline engines

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1963, 536, abstract
4P262 (Czech. pat. 103403, Jan. 15, 1962)

TEXT: An engine oil for two-stroke gasoline engines, which is introduced into the engine mixed with the gasoline, is produced from the aromatic extract from selective-refined mineral oils by using propane extraction to remove the polycyclic compounds from the extract, adsorption refining, H_2SO_4 refining or hydrofining. The polycyclic compounds can be removed from the extract in a mixture with a hydrocarbon solvent such as white spirit, diesel fuel or used engine oil. The refined mixture obtained in this way is used as the engine oil. For example a medium extract (viscosity 380 cst/50°C) was dissolved in white spirit to a viscosity of 75 cst/50°C and then refined with 3 - 4 % H_2SO_4 , lixiviated, washed with water and dried; a refined product was obtained consisting of 75 % oil and Card 1/2

Method of producing engine ...

S/081/63/000/004/040/051
B160/B186

25 % white spirit to be used as engine oil. [Abstracter's note: Complete translation.]

Card 2/2

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3

CEJKA, Frantisek

Fifteen years of the Council of Mutual Economic Assistance.
Report a while 6 no. 11:321 N '64.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3"

CEJKA, F.

Development of the production of lubricants in Czechoslovakia.
Ropa a uhlie 5 no. 12: 353-354 D '63.

1. Ministerstvo chemickeho prumyslu.

CEJKA, Frantisek

Main results and trends in the development of asphalt
products. Ropa a uhlie 6 no. 3: 67 Mr '64.

1. Ministry of Chemical Industry.

CZECHOSLOVAKIA/Cultivated Plants - Fruits. Berries.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82513

Author : Cejka, Gustav

Inst : -

Title : Influence of Soil Tillage on Frost Resistance in Apricot

Orig Pub : Ovocnar. a zelinar. 1957, 5, No 4, 101-102

Abstract : Severe frosts in 1956 injured 44% of apricot trees on the experiment fields in Slovakia. Frost injured only those trees which were in the orchards with grass in the inter-row spaces. Trees in orchards with bare fallow did not suffer. Trees used in the test were planted in 1952 and 1953 on terrain with a gently slope to the south, accessible to northeasterly winds. Precipitation is to 700 millimeters. The latitude of the locality is 150 meters above sea level. The field was divided into 9 plots which were cultivated differently. The trees endured the severe frost well only on those plots which

Card 1/2

CZECHOSLOVAKIA/Cultivated Plants - Fruits. Berries.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82513

had not been planted with grass and were well fertilized. On plots which were not fertilized and the soil cultivation was carried out only in circles close to the trunks, while the inter-row spaces had been seeded with grasses, 39-44% of the trees were slightly frozen. Grass expended a great deal of moisture, and it was noted that on these plots in fall the leaves wilted and yellowed prematurely and the trees were weaker than on other plots. Those trees which grew at the foot of the slope tolerated the frosts considerably better. -- Ye.A. Parshina

Card 2/2

- 132 -

CEJKA, J.; PAUL, V.

"Domestic oils for diffusion pumps." P. 485.

SLABOPROUDY OBZOR. (Ministerstvo presneho strojirenstvi, Ministerstvo spoju a Vedecka technicka spolecnost pro elektrotechniku pri CSAV). Praha, Czechoslovakia, Vol. 16, No. 9, Sept. 1956.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Unclu.

CEJKA, J.

Use of polarized foils in electric-optical modulators. p. 403.

JEMNA MECHANIKA A OPTIKA. Praha, Czechoslovakia. Vol. 3, no. 12, Dec. 1958.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960
Uncl.

Country : CZECHOSLOVAKIA
Category : Inorganic Chemistry. Complex Compounds C
Abs. Jour. : Ref Zhur-Khim, 1959, No 5, 14921
Author : Cejka, J.; Mares, F.
Institut. : -
Title : Isolation of Silicotungstic Acid without the Use of Ether
Orig Pub. : Chem. listy, 1958, 52, No 4, 738

Abstract : To prepare $H_4SiW_{12}O_{40} \cdot 7H_2O$, HCl ($d=1.18$) was added to an aqueous solution of $Na_2WO_4 \cdot 2H_2O$ and Na_2SiO_3 at 80° . Unreacted silica gel was filtered and the filtrate evaporated until dryness. The residue after evaporation was extracted by boiling alcohol which contained 16% HCl. By evaporating the alcoholic extract, silicotungstic acid with a yield of 83.5% was obtained.-- V. Ruzicka

Card: 1/1

C. TKA, J.

Preparation of uranyl carbonate. J. Cejka (Reagendia, Kralupy nad Vltv.), Collection Czechoslov. Chem. Commun., 24, 3180-1 (1959) (in German).—Heating in ultraviolet light at 60–70° in a porcelain dish, 500 g. $\text{UO}_3(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ in 1500 ml. EtOH contg. 2% CaH_2 gave 200 g. red-brown or violet-colored $\text{UO}_{2.4} \cdot \text{H}_2\text{O}$ (I) (cf. Biguand, C.A. 49, 14587f) with evolution of N oxides, AcH, and AcOH; the temp. raised to 65° at the end of the prepn. Nitrates were removed from I by decantation with two 300-ml. portions of redistd. H_2O . Introducing CO_2 for 8 hrs. at 18–20° with vigorous agitation into I in 2000 ml. redistd. H_2O , sepg. the product, washing with Et₂O, and drying at 50° gave 305 g. light yellow or yellow-green UO_2CO_3 contg. 1.09% H_2O . This simple procedure is also suitable for large-scale preps.
B6 146-1

23043

Z/005/60/000/012/006/031
A121/A127

21.3100

AUTHOR: Čejka, Jiří (Roudnice nad Labem)

TITLE: None given

PERIODICAL: Vynálezy, no. 12, 1960, 4

TEXT: (12n, 10; Registered May 16, 1958; Patent Application 2656-58). Pressureless preparation method of uranyl carbonate, characterized by the saturation of $U_3O_8 \cdot H_2O$, obtained by the known reaction of crystalline uranyl nitrate with ethanol at 60 - 70°C under participation of ultra violet rays, in a temperature range of 0 - 30°C at normal pressure by means of a carbon dioxide flux, whereby uranyl carbonate forms.

Card 1/1

CZ/30-60-1-9/20

AUTHOR: Čejka, Josef, Engineer

TITLE: New Optical Bomb Sights

PERIODICAL: Jemná Mechanika a Optika, 1960, No 1, pp 26-28

TEXT: The article describes the construction principle of the synchronous type optical bomb sight. The author explains the problem of sighting, with the aid of formulae (1), (2), (3) and (6). The determination of the true speed of the aircraft in comparison to the indicated speed is demonstrated in the right part of Diagram 1. The construction principles of a synchronous sight are schematically demonstrated in the left part of Diagram 1 and in Diagram 2. The synchronous movement of the line of sighting and of the target is shown in Diagram 3. The mathematical calculation of the synchronous angle speed of the line of sighting, concluded from this Diagram, is performed with the aid of formula (7). The practical utilization of this result is shown in Diagram 4, in which the angle speed of the sighting line is controlled by a rotatable mirror connected by a steel cable with a so-called crank, which is operated with the aid of a pulley by a frictional mechanism. Another solution is shown in Diagram 5, which is

Card 1/2



New Optical Bomb Sights

CZ/30-60-1-9/2C

similar to the aforementioned, except that the crank was replaced by a cam. An overall scheme, demonstrating the functional principles of the most important parts of a synchronous sight are: the absolute speed of the aircraft is measured in the immediate vicinity of the target and can be controlled until the bomb drop; stationary and moving targets can be sighted; and a target and lead mark appear relatively stable in the sight. There are 6 diagrams.

ASSOCIATION: VAAZ, Brno

SUBMITTED: June 12, 1959

(V)

Card 2/2

VODRAZKA, Z.; MACH, O.; CEJKA, J.; KORINEK, J.

Comparision of some chemical and physicochemical properties of
human γ -globulin prepared by using various methods. Coll Cz chem
25 no.3:940-945 Mr '60.
(EEAI 9:12)

1. Institut fur Hamatologie und Bluttransfusion, Prag.
(Gamma globulin)

VODRAZKA, Z.; SALAK, J.; CIEJKA, J.

Acetylation of human serum albumins. Coll Cz chem 25 no.3:946-953
(EEAI 9:12)
Mr '60.

1. Institut fur Hamatologie und Bluttransfusion, Prag.
(Acetylation) (Serum albumin)

KORINEK, J.; FREIOVA, M.; CEJKA, J.

Transferrin from blood plasma. I. Immunochemical analysis of raw
transferrin. Coll Cz chem 25 no.10:2679-2684 0 '60.
(EEAI 10:9)

1. Institut fur Hamatologie und Bluttransfusion, Prag.

(TRANSFERRIN) (BLOOD PLASMA)

CEJKA, J.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: Institute of Hematology and Blood Transfusion, Prague

Source: Prague, Collection of Czechoslovak Chemical Communications,
Vol 26, No 11, November 1961, pp 2813-2816

Data: "Photooxidation of Blood Proteins. VIII. Photooxidation
of Human Haemoglobin in the Presence of Sensitizers."

Authors:

VODRAZKA, Z

CEJKA, J

SALAK, J

CEJKA, Jan

Prague, Czechoslovakia, Vol. 56, No. 5, May 1962 (continued)

12. Book reviews; pp 557-563.
13. "About Publishers, Periodicals, Titles and Special Publications," J. SIEGL and H. KLEIN [affiliation not given]; pp 569-573.
14. "Professor Rudolf STREIBEL, R.D.S., in Syria," T. GROZOVSKY [affiliation not given]; pp 574-581.
15. "Catalogue of Research in Astrology," K. ELMA [affiliation not given]; pp 582-583.
16. "From Electrophysiology - The Theory and Application to the Study of Macromolecular Physics," J. Jan CERNA, [affiliation not given]; pp 584-591.
17. "List of Conference Proceedings," unassigned; p 659.
18. "Review of Foreign Journals and Books," unassigned; pp 660-674.

1014
CIA: 2000-8

— 2/2 —

VODRAZKA, Z.; CEJKA, J.; HRKAL, Z.

"Physical chemistry of macromolecules" by C. Tanford. Reviewed
by Z. Vodrazka, J. Cejka, Z. Hrkal. Chem listy 58 no. 2:248-
249 F '64.

VODRAZKA, Z.; SALAK, J.; CEJKA, J.

On the role of amino groups and aliphatic hydroxyls in the
structure of human hemoglobin. Coll Cz Chem 28 no. 12:3290-
3296 D '63.

1. Institute of Haematology and Blood Transfusion, Prague.

VODRAZKA, Z.; CEJKA, J.

Theory of the oxygenation of hemoglobin. Coll Cz Chem
30 no.1:316-32, Ja '65.

1. Institute of Hematology and Blood Transfusion, Prague.
Submitted July 21, 1964.

CEJKA, Jaroslav, inz.

"Complex analysis of a building enterprise" by S.Vratny and others.
Reviewed by Jaroslav Cejka. Podnik organizace 17 no.1:47-48
Ja '63.

CEJKA, Milan

Health security of crude oil products. Ropa a uhlie 6 no.18
31 Ja '64

1. Benzina National Enterprise, Prague.

CEJKA, Milan; KREMLICKOVA, Jitka

Determining gasoline vapors in the air by indicator tubes.
Ropa a uhlie 6 no.11:345 N '64.

1. Benzina National Enterprise, Department of Lubrication and
Fuel Technology, Prague.

CEJKA, Milan, inz.

Motor oils with detergents. Siln doprava 12 no.6/7:16-17 '64.

1. Benzina National Enterprise.

Cejka, Milan

Biologic activity of petroleum hydrocarbons. Ropá a uhlí 7 no.
1:14-17 Ja '65.

1. Benzina National Enterprise, Prague.

CEJKA, Milan; JIRIK, Vladimir; KRYZE, Franko

Current status of the production and use of petroleum products.
Prac. lek. 7 no. 82366-370 O ' 65.

1. Benzina, n.p., Praha; Ustav hygiény, Praha; Ministerstvo
zdravotnictví, Praha.

CEJKOVA, A.; VOJKOVSKA, M.; RYBAROVA, J.

Evaluation of sugar beet molasses from the 1962 crop for
production of citric acid. Kvasny prum 9 no.11:259-262 N'63.

1. Vyzkumny ustav lihovarskeho a konzervarenskeho prumyslu,
Praha.

CEJKOVA, A.; RYBAROVA, J.; SESTAKOVA, M.

Evaluation of the 1963 campaign sugar beet molasses for the production of citric acid. Kvasny prym 11 no.1:13-16 Ja '65.

1. Research Institute of Distillation and Canning Industry, Prague. Submitted September 30, 1964.

CEJKOVA, Alena

Use of the isopiestic method to determine the osmotic pressure
of concentrated nutrient solutions for the cultivation of osmo-
philic microorganisms. Folia microbiol. (Praha) 10 no.4:246-
250 Jl '65.

1. Research Institute for Fermentation and Canning Industry,
Prague.

CEJKOVA, Zdenka; SIMUNEK, Zeno; SVEJCAR, Jiri

Methods of acid mucopolysaccharide preparation and their
determination. Kozarstvi 13 no.8:227-232 Ag '63.

1. Ustredni vyzkumny ustav potravinarskeho prumyslu a Ustredni
biochemicka laborator Thomayerovy nemocnice, Praha.

CEJKOVA, Zdena; SIMUNEK, Zeno

Color of the sublimation dried moat. Prum potravin 15 no.7:
330-333 J1 '64.

1. Central Research Institute of Food Industry, Prague.

EXCERPTA MEDICA Sec 16 Vol 7/2 Cancer Feb 59

559. *Nucleic acid levels in organs of the irradiated rabbit* Hladiny kyselin nukleových u ozářených králíků. ČEJKOVÁ L. and NOSEK J. Vojenská Lék. Akad., Hradec Králové Cas. Lek. čes. 1958, 97(4-7)(204-208) Graphs 4

In the spleens of rabbits irradiated with 600 r. a significant fall in the level of DNA was found one day after irradiation. Shielding of the liver, spleen and part of the organism produced a significant decrease in this change in the spleen. In the livers of these rabbits a fall in DNA was found from the 6th post-irradiation day, with a significant rise in RNA from the first post-irradiation day. If the organ is shielded the DNA fall is further increased.

CEJKÄ, L.

CEJKÄ, L. [Cejka, L.] (Chekhoslovakiya); NOSEK, Ya. [Nosek, J.]
(Chekhoslovakiya)

Effect of X irradiation on the nucleic acid level in the liver
and spleen of rabbits. Med.rad. 4 no.12:21-24 D '59. (MIRA 13:5)
(NUCLEIC ACIDS metab.)
(LIVER radiation eff.)
(SPLEEN radiation eff.)

CCNA, M.

CZECH

✓ 1274. DEHEDRALIZATION OF WASTE WATERS WITH WI POWDER AT KOBALO WORKS.
KOLIN, Gotka, M. (Vida (Water, Czechoslovakia), 1953, vol. 11, (1),
302, 303; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1955, (2),
2511). The method based on laboratory and semi-industrial scale
experiments, consists in passing waste water through two steam heated
reactors, connected in series and equipped with mixers, and feeding WI
powder (dust from Winkler gas generators) to treat the water. The spent
powder is removed from the bottom of the reactors.

CEJKA, M.

CEJKA, M. Waste water from oil refineries. p. 320

Vol. 5, No. 9, Sept. 1955

VODNI HOSPODARSTVI

TECHNOLOGY

Praha, Czechoslovakia

See: East European Accessions, Vol. 5, No. 5, May 1956

CZECHOSLOVAKIA / Chemical Technology. Chemical Products. H
Refining of Natural Gas and Petroleum. Motor
and Rocket Fuels. Lubricants.

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 68755.

Author : Kabes V., Cejka M., Vesely S.

Inst : Not given.

Title : Structural Changes of the Sodium Type Greases as
the Result of Oxidation.

Orig Pub: Chem. prumysl, 1957, 7, No 11, 590-593.

Abstract: Investigation of the effect of O₂ on physico-chemical properties and structure of greases was conducted employing Hofman's bomb. Composition of grease investigated (in wt.%) was: 83.26-mineral

Card 1/2

CZECHOSLOVAKIA / Chemical Technology. Chemical Products. H
Refining of Natural Gas and Petroleum. Motor
and Rocket Fuels. Lubricants.

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 68755.

Abstract: oil, 9.06-stearic acid, 4.81-oleic acid, 0.61-naphthenic acids, and 2.26-NaOH. Quantities of O₂ used in the tests were determined from the decrease of its pressure in the bomb. Structures were studied with the use of an electron microscope. It was demonstrated that with the increase of O₂ absorbed (or used), the physico-chemical properties of greases (acidity, penetration, viscosity, and others) suffer. Microscopic analyses indicated that this is accompanied by structural deterioration.

Card 2/2

73

S/081/62/000/017/079/102
B177/B186

AUTHORS: Čejka, Milan, Šuskevič, Bohdan

TITLE: A method of preventing the formation of deposits in motors by the treatment of oils containing additives to improve their performance.

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 482; abstract 17M244 (Czechoslovak patent 99497, May 15, 1961)

TEXT: Motor lubricating oils are exposed when in use to high temperatures and are affected by atmospheric oxygen, as well as by the catalytic action of the metals, thereby forming a number of complex organic compounds either soluble or insoluble in the lubricant. These compounds promote corrosion and the formation of deposits on the metal surfaces. A method of freeing the oils from any compounds which cause deposits and scaling, is proposed, which simultaneously neutralizes acid substances. The process consists of mixing the oils in an alkaline medium with organic compounds which easily polymerize at 75 - 95°(a catalyst may be present). The resins thus formed, which are insoluble in engine oils,

* Card 1/2

A method of preventing the formation ... S/081/62/000/017/079/102
B177/B186

cause deposition and adsorption of the dispersed components which also are insoluble in the oil. For example: the oils are heated to 80 - 90°, whereby the volatile fractions condense; 0.2 - 0.5% by weight of NaOH (10% solution) is then added. This is carefully mixed while air is blown through, and a 12% aqueous solution of formaldehyde and urea (mol. ratio 2:1) to 5% by weight is added. After stirring by the air continuously for 1 hour, polymerization begins, accompanied by the formation of resins. Stirring is then stopped and the components insoluble in the oil are separated at about 90° by sedimentation. The oil so prepared is dehydrated while air is subsequently being blown through at 95°, and it undergoes further purification (the authors recommend purification by adsorption, using fuller's earth). [Abstracter's note: Complete translation.] ✓

Card 2/2

CEJKA, V.

"Testing Lubricating Oils in Experimental Engines," p.394. (TECHNICKA PRACA, Vol. 6, No. 7, July 1954, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions, (ESAL), LC, Vol. 4,
No. 1, Jan. 1955, Uncl.

CEJKA, Vojtech

Experience in mechanization of the Edam cheese production in
the Jaromer Dairy. Prum potravin 14 no.10:514 0 '63.

1. Vychedoceske mlekarney, n.p., Pardubice.

CEJKOVA, A.; NEMCANSKA, H.; VINTIKA, J.

Bacterial infection in making feed yeast. Kvasny prum 8
no.12:272-281 D '62.

1. Vyzkumny ustav lihovarskeho a konzervarenskeho prumyslu,
Praha.

BLEKTA, Mojmir; CEJKOVA, Bozena; OPPLT, Jan; RICHTER, A.F., technicka
spoluprace Dobiasova, Marta

Serum examination in late gestosis. Cas.lek.cesk. 99 no.3/4:
70-74 22 Ja '60.

1. II. ustav lekarske chemie University Karlovy v Praze. II. po-
rodnicka klinika University Karlovy v Praze. Oddeleni klinicke
chemie SZN v Praze 12.

(PREGNANCY TOXEMIAS blood)

DUCHON, J.; CEJKOVA, B.; RIGHTER, A.F.

Effect of chloroethanol on some amino acids and peptides. Acta univ.
carol. [med.] Suppl. 14:257-263 '61.

1. II. ustav pro lekarsku chemii fakulty vseobecneho lekarstvi
University Karlovy v Praze, prednosta prof. dr. J. Sula.
(AMINO ACIDS chem) (PEPTIDES chem)
(ALCOHOL ETHYL rel cpds)

RICHTER, A.F.; CEJKOVA, B.; DUCHON J.

Effect of trichloroethanol on amino acids and proteins. Acta univ.
carol. [med.] Suppl. 14:265-270 '61.

1. II. ustav pro lekarskou chemii fakulty vseobecneho lekarstvi University
Karlovych v Praze, prednosta prof. dr. J. Sula.

(ALCOHOL ETHYL rel cpds) (AMINO ACIDS chem)
(PROTEINS chem)

STASTNA, J. HAUSNEROVA, S.; CEJKOVA, J.

Current status of the sensitivity of enteropathogenius *E. coli* serotypes to some antibiotics. Česk. ped. 20 no.12:1071-1075 D ' 65.

1. Katedra patologicke anatomie a mikrobiologie fakulty detskeho lekarstvi Karlovy University v Praze oddeleni mikrobiologie a Mikrobiologické oddeleni , Krajska hygienicko-epidemiologicka sínica, v Českych Budějovicích (vedoucí - doc. dr. V. Potuzník, CSc.).

CEJNA, S.

The basis of correct nutrition in recovery sanatoria. Cesk. pediat.
13 no.5:445-450 5 June 58.

1. Detska ozdravovna v Kamenici nad Lipou, reditel Dr. S. Cejna.
(SANATORIA,
child sanatoria, correct diets & nutrition in (Cz))
(DIETS,
correct diets & nutrition in child sanatoria (Cz))
(PEDIATRIC DISEASES, therapy
sanatoria, correct diets & nutrition in (Cz))

NESPOR, E.; CZEKA, S.

Studies on neuropathies in children in a convalescent home.
Cas. lek. cesk. 99 no.23:717-720 3 Je '60.

1. Neurologické oddělení fakultní polikliniky, prednosta prof.
dr. J. Vitek - Státní dětská ošpravovna v Kamenici n. L. a Sv.
Katerine.
(NEUROLOGY in inf. & child)

CEJNAR, A.; SLEZAK, J.

New finish of cotton fabrics without ironing. p. 386

TEXTIL. (Ministerstvo lehkého průmyslu) Praha, Czechoslovakia. Vol. 14,
no. 10, Oct. 1959.

Monthly list of East European Accessions (EEAI), Vol. 9, no. 1, Jan. 1960

Uncl.

CEJNAR, Emil, inz.; KAMM, Josef

Apparatus for heating the service water by fume gases.
Energetika Cz 12 no.10:527-528 0 '62. (MIRA 15:9)

1. Ceskoslovenske zavody naftovych motoru, Praha.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3

VANICKOVA, Vera; LANGROVA, Marketa; CEJNAROVA, Ada, inz.;
MANDELIKOVA, Milena

Foreign standards. Normalizace 11 no.7:232-236 J1 '63.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3"

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3

VANICKOVA, Vera; MANDELICOVA, Milena; LANGROVA, Marketa;
CEJNAROVA, Ada, inz.

Foreign standards received by the Office of Standardization
and Measurement in August and September 1963. Normalizace
12 no. 4: 102-120 Ap '64.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3"

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3

VANICKOVA, Vera; MANDELICOVA, Milena; LANGROVA, Marketa; CEJNARCOVA, Ada, inz.

Foreign standards. Normalizace 11 no.10:333-339 0 '63.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3"

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3

VANICKOVA, Vera; MANDLICOVA, Milena; LANGROVA, Marketa; CEJNAROVA, Ada, inz.

Foreign standards. Normalizace 12 no.2: 51-60 F'64

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3"

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3

VANICKOVA, Vera; HNEDLIKOVÁ, Milena; LANGROVÁ, Markéta; ČEJMEROVÁ, Ada, inc.

Foreign standards. Normalizace 12 no. 1D:238-324 0 164.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000308020005-3"

CZECHOSLOVAKIA

SIR, Z; GALLEJOVA, J; CEJNAKOVÁ, M; SVAUTOVÁ, K.

1. Research Institute of Tuberculosis (Vyzkumný ústav tuberkulózy), Prague; 2. Institute of Epidemiology and Microbiology (Ústav epidemiologie a mikrobiologie), Prague

Prague, Roschledy v tuberkulóze, No 9, 1963, pp 605-611

"Comparison of results of Tuberculin skin test before and after Monrad in Studies on Postvaccination Allergy following BCG and Dubos Vaccine."

(17)

S/081/63/000/003/031/036
B144/B166

AUTHORS: Berger, Vladimír, Cejp, Josef, Kuča, Miloslav

TITLE: Weather resistance of Czechoslovakian plywood glues under tropical conditions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1963, 604, abstract 3T161 (Dřevo, v. 16, no. 11, 1961, 335-336 [Czech; summaries in Russ. and Ger.])

TEXT: Results are given which were obtained in a 5-year test of plywood samples bonded with urea (UA) and phenol (FA) adhesives, carried out in Viet Nam (moist tropical climate). The samples were exposed both protected from the direct effect of sun and rain, and unprotected. In the first case, the UA plywood samples (~100% filled with wood flour) had come completely unglued by the end of the period; the UA samples without filler retained only ~30% of their original strength, without protection they had already come unglued after 3 - 12 months' exposition. FA plywoods after 5 years' exposition (protected) lost 8 - 20% of their original strength; without protection 70%. Such a reduction in strength

Card 1/2

Weather resistance of ...

S/081/63/000/003/031/036
B144/B186

is due, however, mainly to the wood, and to a considerably lesser extent to the glue; not a single case of unglueing was observed in these samples. The conclusion is drawn that for countries with moist tropical climate the plywood should be bonded with FA; the export of UA plywoods into such countries cannot be recommended. [Abstracter's note: Complete translation.]

Card 2/2

CEJP, K.; SHALICKY, V.

"Occurrence of Ascigerous Stages of Oak Powdery Mildews (Microsphaera Alphitooides Griffon et Maublanc and Phyllactinia Roberis (Gachet) Blumer in Czechoslovakia", p. 43, (PRFSLIA, Vol. 26, No. 1, 1954, Praha, Czech.)

SO: Monthly List of East European Accessions (PEAL), LC, Vol. 4, No. 3, March 1955, Uncl.

CEJP, KAREL

Comycetes

Praha, Czechoslovakia, Ceskoslovenska akademie ved. Vol. 1. 1959. 475 p.

Monthly list of East European Accessions (EEAI), LC, Vol. 9 No 2 Feb 1960
Uncl.

CEJPA, C.; LAZANSKY, J.

Way to the championship; report on preparations of our parachutists for the international competition in Bulgaria.

p. 414
No. 18, Sept. 1955
KRIDLA VLASTI
Praha, Czechoslovakia

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, no. 2
February 1956, Uncl.

CEJPA, C.

International Competitions of parachutists. p. 438.

KRIDLA VLASTI

no. 19, Sept. 1955

Czechoslovakia

Source: EAST EUROPEAN LISTS Vol. 5, no. 7 July 1956

CEJPA, C.

Jumps from a balloon. P. 444 KRIDLA VLASTI Czechoslovakia
No. 19, Sept. 1955

SOURCE: EEAL LC Vol. 5, no. 7, July 1956

Cejpa, C.

Use of a circular navigation computer for calculation of descent.
p. 542. KRIDLÁ VLASTI. (Svaz pro spolupraci s armadou) Praha.
No. 23, Nov. 1955.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

CEJPA, C.

A sevenfold increase and its results. p. 150. (Kridla Vlasti, No. 5, Mar 1957,
Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

CEJPA, C.

For increased security in parachute jumping. p. 313. (Kridla Vlasti, No. 10,
May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

CEJPA, C.

A meeting of the parachutist commission of the International Aeronautical Federation.

P. 14. (KRIDLA VLASTI.) (Praha, Czechoslovakia) No. 3, Feb. 1958

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, 1958

CEJPEK, J.

GEOGRAPHY & GEOLOGY

Periodicals: CESKOSLOVENSKA ETNOGRAFIE Vol. 7, no. 1, 1959

CEJPEK, J. Contribution to the study of Tajik folk literature. p. 29.

Monthly List of East European Accessions (EEAI) LC, Vol 8, No. 5,
May 1959, Unclass.

CEPPOVA, D.

7022

TITRIMETRIC DETERMINATION OF SMALL AMOUNTS OF
THORIUM IN THE PRESENCE OF URANIUM. VI. Major
and N. Celpouš. Collection Czechoslov. Chem. Commun.
15, 813-80 (1950).

The following procedure was used for determination of Th in the range 0.3 to 30 mg of ThO₂ in the presence of U. Thorium oxalate was precipitated from a hot acid solution with a saturated solution of oxalic acid. The solution with the precipitate was left overnight at room temperature. The precipitate was filtered, washed, and dissolved in H₂SO₄, and the solution titrated with KMnO₄. The procedure is suitable for routine analyses.

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

CEJVAN, Fikret, diplomirani inzenir (Lesce)

Selecting a normalized signal value for universal electronic
pneumatic and electronic hydraulic systems. Automatika 4 no.4:
262-263 '63.

1. Tovarna industrijske opreme TIO, Lesce.

L 02363-67

ACC NR: AP6005510

(A)

SOURCE CODE: CZ/0078/66/000/001/002/0027

INVENTOR: Kupec, Jiri (Engineer; Prague); Gekal, Stanislav (Chralkov)

30
B

ORG: none

TITLE: [Circuit of an electronic switch] CZ Pat. No. PV 293-65

SOURCE: Vynalezy, no. 1, 1966, 27

TOPIC TAGS: electronic switch, electronic circuit

ABSTRACT: An electronic switch circuit for the series conductive coupling of several measuring points with one measurement instrument in which blocking circuits in accordance with pulses from generators fill the function of coupling several measurement points with one measurement instrument is described. The distinguishing feature of the device is that between the pulse generator and the counter and between the blocking circuits which are assembled in groups, are connected logical "and" circuits, a monostable circuit and a multistable multivibrator in such a way that the outputs from the counter and from the monostable circuit are connected to the inputs of the blocking circuits of all the groups in the same order as the corresponding logical "and" circuit, and the outputs from the individual positions of the multistable

Card 1/2

L 0236X3-67

ACC NR: AP6005510

multivibrator lead to the individual groups of blocking circuits at the group bus bar. The other inputs of all the blocking circuits in the group are connected to the group bus bar. At the same time the outputs of all the blocking circuits of all groups are connected by bus bars to the input of the measurement instrument.

SUB CODE: 09/ SUBM DATE: 15Jan65

Card 2/2 vmb

CA CERKAN, Z.

17

The assay of Bohemian ergot. Z. Blabek and Z. Čekan (Karlsuniv., Prague). *Casopis Českého Lákařství* 62, 125-130 (1949); *Chem. Zentr.* 1950, I, 1254. Analyses are reported on 27 samples of Bohemian ergot. Total alkaloids were detd. by the method of Allport and Jones (cf. *C.A.* 36, 8009); sol. and insol. alkaloids were detd. by that of Smith (cf. *C.A.* 42, 3135b). The results showed wide variation and no relation to the altitude. The av. value for total alkaloids was 0.094%, with the max. being 0.17%. The av. value for sol. alkaloids was 10.15% of the total alkaloids.
M. G. Moore

CZEKAN, Z.

Variability of the effect of Primula veris L. root. Cesk. farm. 1 no.9:
497-506 1952. (CIML 23:4)

1. Of the Institute of Pharmacology and Pharmacognosy (Head--Prof. B.
Polak, M.D.) of Charles University, Prague.

CH

ČEKAN, Z.

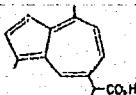
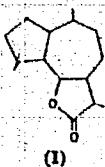
Pharmacol. - 11

Isolation of a spasmolytic substance from Matricaria chamomilla. F. Šorm, Z. Čekan, V. Herout, and H. Račková (Central Chem. Inst., Prague, Czech.). Chem. Listy 46, 308 (1952).—The spasmolytic principle of Chamomile, apigenine (I) (0.45 g.), was isolated by digestion of chamomile blooms (2,514 g.) followed by ether extn. The triacetyl deriv., m. 178-81° (from EtOH), prep'd. from 120 mg. I and 7.5 ml. Ac₂O was hydrolyzed with 10% HCl to give a yellow powder, m. 342-4°. M. Hudlický

Cekan, Z.

CZECH

*Chamazulene precursor from chamomile (*Matricaria chamomilla L.*). Z. Cekan, V. Herout, and F. Šorník (Czech. Acad. Sci., Prague); *Chemistry in Industry* 1954, 104-5; cf. *C.A.* 49, 1976. Cryst. I, $C_{11}H_{16}O_4$, m. 168-170° (decomp.), having 2 double bonds, an acetyl and hydroxyl group of unassigned position has been isolated in cryst. form from *Matricaria chamomilla L.* as a precursor of chamazulene (II). The ultraviolet absorption spectrum showed a max. at 243μ , $\log E$ 4.32. On hydrogenation*



2.9 equiv. of H were absorbed and 2, probably stereoisomeric, lactones, $C_9H_{14}O_4$, m. 115.5° and 122-3°, were isolated. Steam distn. of I gave 70-75% II by the elimination of 3 HO groups and subsequent decarboxylation. III is proposed as an intermediate in this reaction (Jung and Wendler, *C.A.* 47, 10809g) and the name guaiazulenic acid is suggested. The name guanolides is proposed for compds. contg. a lactone group on a guaiane skeleton. The antiplastic activity of I has been found to be at least equal to that of II.

M. M. Bender

RK
f

ČEKAN, Z.; HEROUT, A.

Flavone glycosides from Petroselinum sativum Hoffm. Česk. farm.
3 no.5:165-169 My '54.

1. Oddeleni prirozenych latek. Ustav organické chemie, Česko-
slovenska akademie ved., Praha.

(PLANTS,

*Petroselinum sativum, flavone glycosides)

(GLYCOSIDES,

*Petroselinum sativum, flavone glycosides)

CIA AG 2

SEMAN, Z.; HEROUT, V.; SORM, F.

On terpenes. IXII. Isolation and properties of the pro-a-norulene from *Matricaria chamomilla* L., a further compound of the matricaride group. In English. p.727 (Collection of Czechoslovak Chemical Communication. Praha. Vol. 19, no. 4, Aug. 1954) ^{East} SC: Monthly List of European Accessions (EAL), EC, Vol. 4, No. 4, June 1955, Ugel.

CEKAN, L. ZDENER

Plant substances. IV. Isolation of 5-hydroxy-3,3',4',6,7-pentamethoxyflavone from *Artemisia absinthium* L. C. Zdenek Čekan and Vlastimil Herout (Czech. Akad. Věd, Prague), Čas. Líky 49, 1053-8 (1955); cf. C.A. 49, 9804a.—A compd. $C_{21}H_{22}O_6$, m. 161.5° (C.A. 49, 997c, erroneously reported as m. 185.5°), isolated from *A. absinthium* was identified as 5-hydroxy-3,3',4',6,7-pentamethoxyflavone (I) for which the name artemelin is suggested. Methylation of 0.5 g. I with 3.6 g. $MgSO_4$ in 20 ml. 10% NaOH and 10 ml. CH_3CO_2 gave 0.4 g. 3,3',4',5,6,7-hexamethoxyflavone (hexamethylquercetin) (II), m. 142-3° [from CH_3CO -(iso-Pr)₂O]. Refluxing 0.5 g. I 3.5 hrs. with 20 ml. 49% HBr, and acetylation the crude product by refluxing 3 hrs. with 20 ml. Ac_2O gave 0.3 g. 3,3',4',5,6,7-hexaacetylquercetin (III), m. 216-17° (from CH_3CO). Refluxing 0.25 g. II 2 hrs. with 25 ml. MeOH, 0.25 g. $KHCO_3$, and 5 ml. H_2O , and crystg. the product after acidification of the mixt. from EtOH gave quercetin (IV),—decomp., 300-5°. Alk. hydrolysis of 0.5 g. I by refluxing 10 hrs. with 35 ml. 60% KOH gave 3,4-(MeO)₂CH₂CO₂H. To prove the position of the free OH group in I, I (1 g.) was dissolved in 20 ml. CH_3N , 0.75 g. KOH and 25 ml. H_2O added, and the mixt. treated with 1.5 g. $K_2S_2O_8$ in 50 ml. H_2O and 0.75 g. KOH in 35 ml. H_2O . The mixt. was acidified after 24 hrs., the ppt. filtered off, the filtrate extd. with Bu_2O and heated 45 min. at 100° with 20 ml. concd. HCl and 3 g. Na_2SO_3 . The product, 5,8-dihydroxy-3,3',4',6,7-pentamethoxyflavone, m. 249-51° (from CH_3CO), gave with *p*-bichlorulinone a red ppt. of a quinone of the flavone series. Ultraviolet spectra of I, II, and IV are given. M. Hudlický

Cekan, Z. Structure of misticin. Z. Cekan, V. Herout, and F.

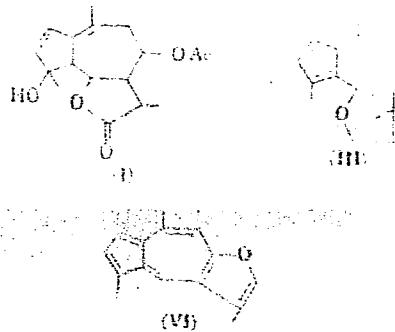
3

Reaction of 1,3-dihydro-2H-1,2-dioxo-3-oxo-4H-1,2-dihydro-4-oxo-5-oxazolone (I) gave 8-hydroxyguanolinol, m. 167°, which was oxidized

with CrO₃ in HOAc to the ox/guanolinide, m. 111-13°. This latter was converted via the ethylenethioketal, m. 145-8°, and desulfurization with Raney Ni to 8,12-guanolinide (II), m. 130-5° (ca. 0 temp.). Reduction of II with LiAlH₄ gave 8,12-guanolinol, which on dehydrogenation with Se at 280-300° gave pentaneone (III). Hydrogenation of I in EtOH gave 1,4-dihydro-1-acetoxy-8,12-guanolinide (IV), m. 190.5-8.0°. Hydrolysis of IV formed the 1,6-dihydro-guanolinide (V), m. 183.5-10°. Reduction of IV with LiAlH₄ in boiling Et₂O gave the lactol, m. 142-52°, which on

Cekan, Z., Herout, V., Sorm, F.

Reaction of lactone carbonyl as shown in No. 1
with LiAlD_4



E. H. Lindquist 2/2

PAK

CEKAN, Z.

CEKAN, Z. PLANT substances. IV. Isolation of 5, oxy-3, 6, 7, 3', 4' - pentamethoxyflavone from worm wood (Artemisia absinthium L.). In German, p. 79. Vol. 21, No. 1, Feb. 1956. SEORNIK CHEKOSLOVATSKIKH KHIMICHESKIKH RABOT. COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. Praha, CZECHOSLOVAKIA.

SOURCE: EAST EUROPEAN ACCESSIONSLIST (EEAL) Vol 6, No. 4, April 1957

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G-3

Abs Jour : RZhKhim., No 10, 1958; No 32587

Author : Zdenek Cakan, Vaclavimil Herout, Frantisek Sorm

Inst : Not given

Title : Terpenes. LXXX. Structure of Matricine, Gaianolide from
German Camomile.Orig Pub : Chom. listy, 1957, 51, No 4, 756-763; Sb. chekhols. khim.
robot, 1957, 22, No 6, 1921-1929.

Abstract : The authors proved that matricine (I) - a prochamazule-
nic substance from German camomile (*Matricaria cha-*
momilla L.) - seems to be 1-oxy-6-acetoxyguaiano-2,4(10)-
-diene-2,4(10)-oxide-8,12. It was proved already in the pre-
going reports that I contained an oxygroup, a -lactone, an
acetoxy group and two conjugate binary bonds (see RZhKhim,
1955, 16437, 35386). Two stereoisomeric hydrogenolysis pro-

Card 1/8

36

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G-3

Abs Jour : RZhKhim., No 10, 1958, No 32587

1,6-dioxyguianolide-8,12 (VI) was synthetized from III in a similar way. The initial product was obtained by the saponification of that substance with NaOH and acidification. III was produced by the acetylation of VI with $(CH_3CO)_2O$ in C_5H_5N . V was oxidized with CrO_3 in glacial CH_3COOH into 6-ketoguaianolide-8,12 (VIII); it was proved with it that the acetyl group is bonded with the secondary oxy group. Ethylenethicketal was synthetized by the action of ethanedithiol on VII, after desulfonation with spongy Ni it yielded a previously unknown liquid guianolide (VIII). Guianodiol-8,12 (IX) is formed at the reduction of VIII with $LiAlH_4$, it produces artemazulene (X) if dehydrogenated with So, which is a proof that the lactone cycle between the carbon atoms C(8) and C(12) has been closed. Lactol (XI) was prepared by reducing III with $LiAlH_4$ in ether. The expected

Card 3/8

37

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G-3

Abs Jour : RZhKhim., No 10, 1958, No 32587

tetrol (XII) was detected only in a small amount in mother liquors (by paper chromatography). XII was synthetized by reducing with LiAlH₄ at an elevated temperature in N-ethyl-pyridine. XI produces X when dehydrogenated with Se, while XII produces a mixture of X with linderaazulene (XIII) under the same conditions. The formation of XIII together with X from XII is a proof that the position of the acetoxy group is at C(6). III is stable with respect to CrO₂ in glacial CH₃COOH in the cold, while VI produces 1-oxy-6-kotoguaienolide-8,12 (XIV) under the same conditions, which is a proof that the free oxy group in I is a tertiary group. Ketoguaienene-1(9)-olide-8,12 (XV) was synthetized by the dehydrogenation of XIV with BF₃ esterate or HCOOH, its binary bond is not conjugate either with the lactone carbonyl, or the ketone carbonyl, which is shown by the infrared and

Card 4/8

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G-3

Abs Jour : RZhKhim., No 10, 1958, No 32587

ultraviolet spectra. XII does not change even after a 70 hour action of HIO_4 . The above presented formula was attributed based on a discussion of ultraviolet and infrared spectra and all the experimental results. IIa and IIb, melting point 115.5° , $[\alpha]_{20}^D = -6.5^\circ$ ($c = 10.1$; all α -s in chloroform); melting point 123° , $[\alpha]_{20}^D = -9.0^\circ$ ($c = 4.3$). III, melting point 183 to 184° , $[\alpha]_{20}^D = +12.5^\circ$ ($c = 5.8$); IV, melting point 166.6 to 168° , $[\alpha]_{20}^D = -20.5^\circ$ ($c = 11.1$), was separated from mother liquors after the crystallization of III. IV can be converted into III by hydrogenation on PtO_2 in glacial CH_3COOH . V, melting point 157° (from diisopropyl ether - petroleum ether), was obtained from 289 mg of IIa and aqueous-methanol solution of K_2CO_3 (48 hours of seining), yield 221 mg. Similarly, 0.85 g of VI, melting point 138.5 to 140° (from diisopropyl ether - acetone), $[\alpha]_{20}^D = +33.0^\circ$ ($c = 0.91$), was received from 1.1 g of III.

Card 5/z

38

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G-3

Abs Jour RZhKhim, No 10, 1958, No 32587

VII (218 mg), melting point 111 to 112° (from aqueous alcohol), was prepared of 223 mg of V and 66 mg of CrO₃ in glacial CH₃COOH (48 hours of seasoning at 0°), yield 218 mg. VII ethylenethioketal, melting point 145 to 146° (from alcohol), was synthetized of 147 mg of VII and 0.5 of ethanedithiol in the presence of BF₃ esterate (20 minutes of seasoning). VIII, boiling point 130 to 135° under 0.4 mm(bath), $[\alpha]_{D}^{20} = -52.6^{\circ}$ (c = 3.5), d₄²⁰ = 1.0525, was produced of 153 mg of the foregoing compound by boiling it with 2 mlit of Raney's catalyst in dioxane, yield 100 mg. IX, melting point 95 to 97°, $[\alpha]_{D}^{20} = -16.7^{\circ}$ (c = 4.3), was synthetized of 62 mg of VIII by reducing it with LaAlH₄ in ether, yield 62 mg. X is forming at the dehydrogenation of IX with Se (10 minutes at 280 to 300°). XI, melting point 148 to 152° (from diisopropyl ether - acetone), $[\alpha]_{D}^{20} = +80.3^{\circ}$ (c =

Card 6/5